Fruit flies are one of the most destructive pests to Hawaii’s agricultural industry and backyard fruits and vegetables, infesting over 400 varieties of fruits and vegetables. Currently, there are four fruit fly species of economic importance in Hawaii. They are: 1) melon fly, 2) Mediterranean fruit fly, 3) Oriental fruit fly, and 4) Malaysian or the Solanaceous fruit fly.

Fruit fly suppression in backyard gardens is as simple as 1, 2, 3, & 4. Simple techniques such as 1) population monitoring, 2) field sanitation, 3) protein bait sprays and 4) male annihilation can help minimize fruit fly infestations and build up.

**Step One: Population Monitoring**

**Know your pests.**

**Mediterranean Fruit Fly**

*Ceratitis capitata* (Wiedemann)

**Identification:** Smaller "picture wing" with a brownish yellow band across the middle of each wing.

Medfly, introduced in 1907, became well established throughout the Hawaiian Islands within four years. Important hosts include coffee, citrus, loquat, persimmon, guava, papaya, and peach. Medfly is distributed in patches near leeward, dry areas at both high and low elevations.

**Attractant Selection**

While trimedlure is commonly used to monitor Mediterranean fruit fly populations, a new lure, Biolure med fly ® attracts both males and females and has successfully been used to mass trap Mediterranean fruit fly in commercial persimmon orchards in Hawaii. Biolure med fly ® lure is the trade name for the 3 component food bait. It is a combination of three chemicals that produce odors attractive to medfly male and females. It does not attract other species to any appreciable degree.
Create a Trap
Materials Needed:

- Multi-lure trap ® a.k.a., yellow traps
- Flexible & strong hanging wire
- Biolure Med Fly ® lure
- Sticky cards or soapy water

A Step by Step
Do It Yourself

- Utilize a multi-lure® trap to hold Biolure Med Fly ® lures (Fig. 1).
- Biolure Med Fly ® lures consist of a set of three chemical release packets (Fig. 2).
  - ammonium acetate (FFA)
  - trimethylamine (FFT)
  - putrescine (FFP)
- An all in one med fly lure is under development (Fig.3).
- Remove plastic or foil covering from the three inserts.
- Peel off paper from the adhesive and stick each insert onto the inside cover of the multi-lure ® trap (Fig.4).
- Utilize soapy water to catch fruit flies (Fig. 5) OR
- Utilize sticky cards to catch fruit flies (Fig. 6)
- Remove narrow strip from back of sticky card and fold in half.
- Remove paper covering sticky glue and place between the tabs on inside of the multilure ® trap cover. Flies that are attracted into the trap by the Biolure Med Fly ® lure will land on the sticky card and die.
- Align cover with notches on the bottom of the multi-lure ® trap and lock in place.
- Hang traps in or around fruit trees i.e. persimmon, citrus, loquat, guava.
- Fruit flies caught in traps should be counted, recorded and removed.
- Replace soapy water /sticky cards as they become filled with fruit flies.
- Change Biolure Med Fly ® lures every 8-10 weeks.

HAW-FLYPM
A Cooperative Project Between USDA-ARS, UH CTAHR,
Hawaii DOA, Hawaii’s Growers and Communities